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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,628	12/08/2000	Masato Higashi	43890-448	3423
7590	10/29/2003		EXAMINER	RIMELL, SAMUEL G
Mcdermott Will & Emery 600 13th Street NW Washington, DC 20005-3096			ART UNIT	PAPER NUMBER 2175
DATE MAILED: 10/29/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	HIGASHI, MASATO	
09/673,628		
Examiner Sam Rimell	Art Unit 2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
2a) This action is **FINAL**. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 and 10-13 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
5) Claim(s) ____ is/are allowed.
6) Claim(s) 1-8, 10-13 is/are rejected.
7) Claim(s) ____ is/are objected to.
8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

SAM RIMELL
SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ .
4) Interview Summary (PTO-413) Paper No(s) ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____ .

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-8 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Bealkowski et al. ('075).

Claim 1: Bealkowski et al. discloses a computer system (FIG. 1B) which includes a plurality of disk devices (individual computers 102 and 102B). Each disk device (individual computer) includes a first memory composed of two memory banks (col. 17, lines 48-49) which are for the purpose of storing firmware. An update program is used to update the firmware in each of the two memory banks on each disk device (col. 9, lines 66-67 and col. 17, lines 46-55). The update program can be loaded from one disk device (server 102 in FIG. 1B) to other disk devices (clients 102b in FIG. 1B). The process of transferring the update program across disk devices is further described at col. 10, lines 2-11.

Claim 2: Bealkowski et al. discloses a computer system (FIG. 1B) which includes a plurality of disk devices (individual computers 102 and 102B). Each disk device (individual computer) includes a first memory and second memory composed of two memory banks (col. 17, lines 48-49) which have the purpose of storing firmware. Col. 19, lines 23-31 describe the steps of starting an updating program, then transmitting and storing the firmware in both the first and second memories (memory banks). This has the effect of the updating the existing firmware in these memory banks.

Claim 3: Col. 18, lines 49-52 describe each memory bank as being associated with a “version number” and “sequence number” of the firmware contained in that bank. When a bank is reprogrammed with new firmware, the new firmware will inherently bring with it a new version number. The version number reads as the “revision number”.

Claim 4-6: As seen in col. 18, lines 49-52, each version of firmware comes with a version number and a sequence number, which read as the respective “revision number” and “model number”. Firmware having any revision number or model number may be stored in the updating program and used to update any existing revision numbers and model numbers already residing in the firmware contained in the memory banks.

Claim 7: The updating can occur automatically after a power-up (col. 19, lines 53-55).

Claim 8: FIG. 1B illustrates a computer system composed of a plurality of disk devices (server 102 and clients 102b). Each disk device has first and second memories (memory banks 502 and 504 in FIG. 5A). The memories on each disk device can store an update program (col. 9, lines 66-67 and col. 17, lines 46-55).

Claim 10: Col. 18, lines 49-56 describe a version code or version number, which is a parameter of the firmware. The version code of one memory bank is compared to the version code of another memory bank to determine if the memory firmware in one of the memory banks needs updating. This process can occur in each of the disk devices (individual computers 102, 102B).

Claim 11: See remarks for claim 10.

Claim 12: Each disk device (individual computer 102 or 102B) includes first and second memories, which are the first and second memory banks (col. 17, lines 47-48).

Claim 13: See remarks for claim 10.

Remarks

Applicant's arguments and amendments have been considered.

Applicant's arguments reflect the amendments submitted with respect to claims 1 and 8.

With respect to claim 1, applicant argues that Bealkowski et al. does not disclose updating the firmware of one disk device to another disk device. However, this feature is clearly taught in Bealkowski et al. at col. 10, lines 2-11, as well as col. 3, lines 37-43.

With respect to claim 8, applicant argues that Bealkowski et al. lacks the claimed feature of "a second memory for selectively storing a selected firmware of one of said plurality of disk devices." As described in the office action herein, FIG. 1B disclose a plurality of disk devices (computers) and each device has first and second memory banks (FIG. 5A). Firmware is stored on each of the disk devices and each of the memory banks of each disk device.



Sam Rimell
Primary Examiner
Art Unit 2175